# Indiana Department of Natural Resources Division of Forestry

## Forester's Narrative

State Forest Ferdinand Compartment 06 Tract 06 Forester Jason Woodard Date March 27, 2008

#### Location

Tract 06 Compartment 06 is located in Sections 1 and 2, T4S, R3W of Clark Township in Perry County. The tract is 2.5 miles south-west of Possum Junction (Exit 74 of I-64). Then is 1/3 of a mile west of Sassafras on County Road Courtney.

## **General Description**

This tract is approximately 77 acres consisting of 14 acres of pine located on the ridgetops. The largest portion of the pine is White Pine, but there is also some Virginia and Red Pine mixed in. The remaining 63 in this tract consists of ridges and bottomlands that are dominated by the hardwoods.

## **History**

This tract was purchased in 1958 from Ollie E. and Joseph G. Hudson for \$1.00. The 77 acre tract was part of a 100 acre acquisition. There was a pine planting in the early to mid 1960's totaling 19 acres. An inventory was completed on this tract is 1984 by Janet Eger. The main species in the tract were white oak, red oak, black oak, and yellow-poplar. The total commercial volume for the tract was 170,043 board feet, with an average of 3,036 board feet per acre. In 1999 there was a boundary change that converted the part of the tract on the south side of the road to Tract 05. In 2002 a small clearing of brush around a waterhole was completed leaving about ¾ of the bank growing with small trees. In 2008 a vine TSI was completed by Randy Ingle and Joe Mullen with a saw over the entire 77 acre tract.

## **Landscape Context**

This tract is surrounded mostly by private land. The land is typically forested although there are some agricultural areas to the west. The property is bordered by Ferdinand State Forest Compartment 06 Tract 05 on the south side of county road Courtney. This tract also connects at the northwest corner with Compartment 06 Tract 04. The town of Sassafras is only about ¾ of a mile to the east of this tract, but is not a large expanding community.

## Topography, Geology and Hydrology

This tract is made up of a mix of ridges, slopes, and bottoms. There are several ridges that run throughout the tract running north and south, as well as east and west. The slopes running off the ridges range from moderately sloping to steep slopes, to almost low rolling slopes. There are several drainages throughout the tract; however there are no

blue-line streams within the tract. The bottomland areas are generally small, running along the intermittent streams.

## **Soils**

This tract contains seven different soil types: Gilpin-Wellston Muskingum Aassociation, Pope Loam, four Wellston Silt Loams and Zanesville Silt Loam.

Gilpin-Wellston-Muskingum association- 25-36% slopes (GmF) This soil type occurs on long steep slopes in uplands. The Gilpin Soil is a moderately deep soil and makes up about 45% of the association. The Wellston Silt Loam ranges from deep to moderately deep soils, and makes up about 25% of the association. It is generally 20-36 inches thick, over material weathered from sandstone, siltstone, and shale. Muskingum Channery Silt Loam, stony phase, which is moderately deep and makes up about 20% of the association. The subsoil is made up of 20-40% of channery fragments. The remaining 10% of the soil is made up of other soils.

Pope Loam, channery subsoil variant 0-2% slopes (Po) This soil is occurs on narrow areas on bottomlands along streams and developed in alluvium. This soil has low organic matter, low available moisture capacity and has moderately rapid permeability. Surface runoff tends to be slow for this soil type.

Wellston Silt Loams- there are four soils in this category (WID, WID3, WIE, WIE3). These soils generally occur on short breaks at the head of draws and side slopes below the ridgetops. In many cases these soils have shale and bedrock that becomes exposed due to the steepness of the slopes and erosion risks. Surface runoff is medium to rapid with erosion control being the main risk concern with these soils.

Zanesville Silt Loam- 2-6% slopes (ZaB2). This soil occurs on ridgetops, lost 4-6 inches of the original layer through erosion. Surface runoff is slow and erosion is the main hazard. This soil has low organic matter and natural fertility while available moositure capacity is medium.

#### Access

Access to this tract is very good throughout the entire tract. On the south edge of the tract is county road Courtney. Firelane 25 runs through the tract starting at the southeast corner and cutting across to the northwest corner of the tract. There are also fingers running east and west as well as north and south that branch off of the firelane. The only concern within this tract could be the steepness of the slopes in some areas causing an access issue.

## **Boundary**

This tract contains only one stone. Stone C-9 is marked with two sets of State Forest signs and has an "X" on top. It is an oddly shaped stone. Just north-east of the stone is a large dead hickory tree with fencing attached. The southern line is fairly well defined with fencing running continuously to the next corner to the south. This line was marked with pink ribbon. The north-east corner was marked with a steel post that was at one time painted orange and still has remnants of orange flagging..

#### Wildlife

There is a wide variety of wildlife throughout the tract. This tract has an adequate supply for wildlife needs. The majority of the tract is made of oaks and hickories which provide great mast crops for small game like squirrels and birds, as well as large game like turkeys and deer. This tract also has several brush areas especially in and around the pine stand which allows for great cover against predators and weather conditions. There is also some agriculture to the west which provides another food source. Wildlife such as deer, turkey, squirrel and many bird species have been observed while inventorying the tract

#### Indiana Bat

The Indiana Bat Habitat has four size classifications of trees for Bats, 11" plus, 20" plus, which account for the live trees and the 9" plus, and 19" plus DBH which account for the snags. There are also several species types that are considered useful for the Indiana Bat, Shagbark Hickory, Bitternut Hickory, Shellbark Hickory, Northern Red Oak, Post Oak White Oak, Black Locust, Sugar Maple, Silver Maple White Ash Green Ash Slippery Elm, American elm, and Eastern Cottonwood. In the live tree group the numbers were low. The 11" class requires 693 trees for this tract, however only 452 were counted. The 20" class was also below the requirements of 231, with just 104. The snags were also below the required amount needed for this tract. The 9" and 19" were below the requirements, with 9" having 345and needing 462, and 19" having 21 when needing 77 to meet habitat requirements.

#### **Communities**

A Natural Heritage Database review was obtained for this tract. If rare, threatened or endangered species were identified for this area, the activities prescribed in this guide will be conducted in a manner that will not threaten the viability of those species.

#### Recreation

There are no recreation facilities within this tract. Hunting is the only recreation opportunity on this tract, with public access being good, due to the south edge of the tract being bordered by county road Courtney. There is sign of people being in this tract due to litter such as old bottles and cans.

## **Cultural**

Cultural resources may be present on this tract but their location is protected. Adverse impacts to significant cultural resources will be avoided during any management or construction activities.

## Tract Subdivision Description and Silvicultural Prescription

Pine

There is approximately 14 acres of pine within this stand. There is 4 acres that consists of a mix of Red and Virginia Pine, while the other 10 acres of pine is dominated by White Pine. There is a total of 45,160 bd. Ft of pine within this tract. The White Pine looks good most trees are around the 14-20" DBH. The mixed pine area also has some hardwoods coming in while the pine looks like it is on the decline and is beginning to convert to hardwoods.

#### Hardwoods

Mixed hardwoods cover the remaining 63 acres within this tract. There are four species that dominate the hardwoods Black Oak, White Oak, Yellow-Poplar, and Pignut Hickory. White Oak is the most dominate species with 96,650 total bd. Ft, Black Oak is next with 85,980 total bd.ft, Yellow-Poplar is the third most dominant species with 63,460 total bd.ft, and the other dominant species is Pignut Hickory with 45,080 total bd.ft. The White Oak ranges from pole size trees to trees exceeding 20" DBH, however most of them are not mature. The Black Oak is very similar to White Oak but there are several trees that should be taken out due to poor form although they are not quite mauture. The Yellow-Poplar are mostly pole size trees, however the large trees overall look okay and can be left however there are some that are suffering from the drought stress and should be harvested. The hickory within the stand is mostly pole size trees and should be left to mature. The main species being harvested within this stand is the Black Oak with a total of 50,600 bd.ft. being harvested.

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## **Summary Tract Silvicultural Prescription and Proposed Activities**

This tract could have a very light selective harvest to help with the overall vigor of the oak/hickory stand, with a post TSI shortly after the harvest to assure the quality of the trees within the stand. There are two areas where possible small openings could be created due to the lack of desirable species. A grapevine TSI is not a concern, due to a TSI that was completed in January of 2008.

This tract should be re-inventoried in 2023.

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